

## THE INTENSIVE EXCHANGES FLOWS About a “New Regionalism”: OBOR («One Belt, One Road»)

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### ABSTRACT

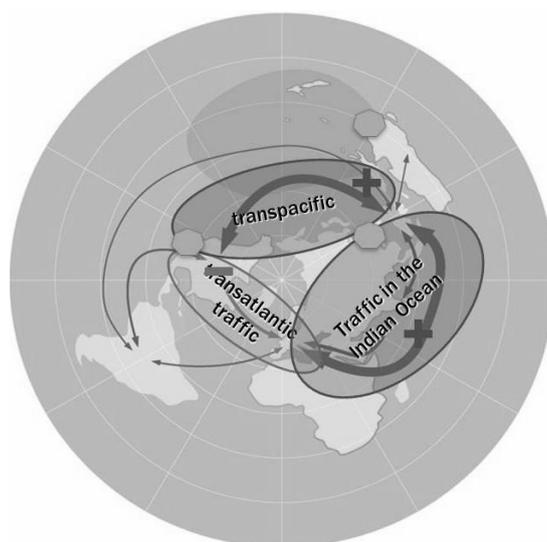
*Regionalism agreements are susceptible to create a traffic diversion. Since the beginning of the millennium, multilateralism stalled (cycle Doha down); where so-called regional's policies are impulse whether from United States (TPP, TTIP) or China (OBOR: New Silk Road launched in 2013). These attempts agreements take place in the areas traversed by intensive exchanges flows, tangible and intangible. Knowledge, Innovation and Trade reinforce each other by intensity. The «intensive exchanges flows» are a transformation of macroeconomics solidarities. Since 1986, a global business cycle is based on a more or less highly dynamic of exchanges: rather an informal regionalism of major trade roads. Exchange and Knowledge are joined, but with non-linearity: spillovers of knowledge are bigger if exchanges are more than average.*

**KEYWORDS :** *Innovation, China, OBOR*

**JEL CLASSIFICATION:** *O24*

### 1. INTRODUCTION : ANALYSIS OF A “NEW REGIONALISM”

The difficulties faced by the Doha Round multilateral negotiations led to regional initiatives, driven mainly by the US and China. This "new regionalism" has partnership around common characteristics of intense trade flows, tangible and intangible. This new regionalism is that of intense trade flows.



**Figure 1. World traffic of containers (2007)**

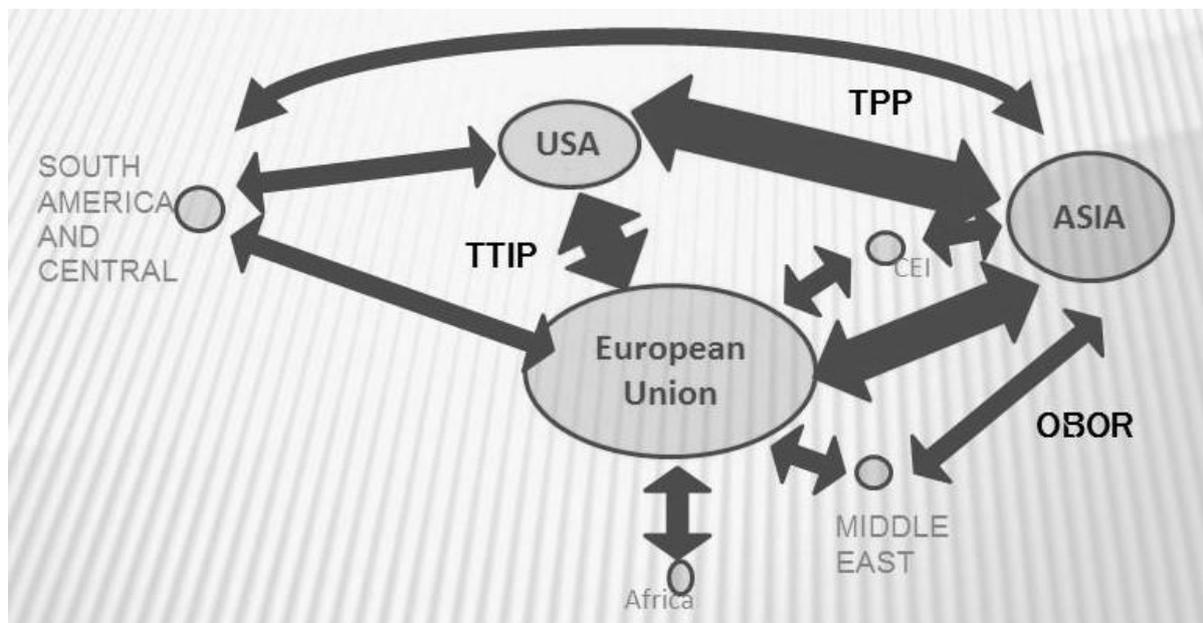
The three main regional gestating agreements concern the three main trade flows:

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- Transpacific Flows with Trans Pacific Partnership (TPP)
- Eurasian flows with One Belt One Road (OBOR)
- Transatlantic flows with the Transatlantic Trade and Investment Partnership (TTIP).

In October 2015, twelve countries signed the TPP agreement, 57 are negotiating as founding of the Asian Infrastructure Investment Bank, pillar of OBOR, while TTIP negotiations take place between the European Union and the USA.



**Figure 2. Trade flows and new regionalism**

Eurasian segment is the largest in volume of trade. A trade policy initiative is led by China since 2013, through the OBOR (One Belt, One Road), investments to revitalize the Silk Road. Six groups of countries can be distinguished, with three groups of pivotal countries who contract two regional agreements. No country is a stakeholder of the three agreements.

<b>OBOR</b>	China, United Arab Emirates, Austria, Azerbaijan, Bangladesh, Brazil, Switzerland, Egypt, Georgia, Indonesia, India, Iran, Iceland, Israel, Jordan, Kazakhstan, Kyrgyzstan, Cambodia, South Korea, Kuwait, Laos, Sri Lanka, Maldives, Myanmar, Mongolia, Norway, Nepal, Oman, Pakistan, Philippines, Qatar, Russia, Saudi Arabia, Thailand, Tajikistan, Turkey, Uzbekistan, South Africa
<b>OBOR &amp; TPP</b>	Australia, Brunei, Malaysia, New Zealand, Vietnam
<b>TPP</b>	Chile, Japan, Mexico, Peru
<b>TPP &amp; TTIP</b>	USA, Canada (special agreement with the European Union)
<b>TTIP</b>	Belgium, Bulgaria, Cyprus, Czech Rep, Estonia, Croatia, Hungary, Ireland, Lithuania, Latvia, Romania, Czech. Slovakia, Slovenia
<b>TTIP &amp; OBOR</b>	Germany, Denmark, Spain, Finland, France, United Kingdom, Italy, Luxembourg, Malta, Netherlands, Poland, Portugal, Sweden

Note: at 10.22.2015, the lists of signatories are provisional except for the TPP agreement.

**Figure 3. Countries participating in the agreements (OBOR, TPP, TTIP)**

The theoretical instruments to analyze this "new regionalism" remain largely to develop, literature being focused on the effects of proximity, while the new regionalism articulates on major trade roads of 10 000 km long and do it involve "remote effects" that have no theoretical status.

We will progress as follows. First specify an intense trade flows approach (§2). We then discuss the case of the Silk Road yesterday (§3) and today (§4).

## 2. DEFINE AN APPROACH OF «INTENSIVE EXCHANGES FLOWS»

Globalization is a transformation of macroeconomics solidarities. Before 1986, proximity effects are very important; neighbors solidarities facing exogenous shocks (oil crisis ...). Since 1986, a global business cycle based on a more or less highly dynamic of exchanges: rather an informal regionalism of major trade roads.

The trade positively affects the transmission of knowledge. Being in the Grossman-Helpman literature vein, a recent study indicates that this relationship is nonlinear (Fracasso & Vittucci, 2015): the trade affects, in such a nonlinearly way, the transmission of knowledge. That is to distinguish three groups of countries. A first group of countries contributes only weakly to international trade in goods and has no impact on growth or knowledge. Intermediate countries are in a gradual emergence of benefits. Finally intense trade flows, however, quite low above average flows (a threshold about 114 % according to the cited study), multiply the benefits.

In the ranking of countries by their dynamism for innovation, the first major country that is not affected by the new regionalism OBOR / TPP / TTIP Argentina is in the 72nd place (out of 141 listed in 2015: Dutta, Lanvin & Wunsch-Vincent, 2015). The New Regionalism concerns all countries with strong trade flows and a high level of innovation, as well as countries in Central and South Asia crossed by these flows. The fast progress of China in the same ranking illustrates undoubtedly this nonlinearity proposed by recent studies (Fracasso & Vittucci, 2015; Guy, 2011). The Silk Road has gone from an indolent regime to a fast regime, having a ripple effect for the high-tech content of traded goods.

In Romer vein literature, innovations are new combinations and growth results from the variety of goods and services. From a Model of three Sectors (R&D, capital good, final good), two countries, it can be characterized two growth regim either *Ginf*, indolent growth, or **Gsup** the optimal growth (Darreau, 2003). *Ginf* is obtained in autarky, or freedom of capital or equipment but not of knowledge. **Gsup** is obtained with freedom of final goods and free diffusion of knowledge combined. If there are freedom of knowledge, but not for capital or equipment, **Gsup** is still obtained (Darreau, 2003). Here, the approach of Romer emphasizes the variety of goods and services: there may be two groups of countries, a trader few unprocessed primary products (energy, agricultural products), the other group exchanging a wide variety of products and services.

Literature « C-A-G-E-T- » on the effects of distance was submitted by Ghemawat (2001): Whether a distance (or conversely, proximity) Cultural, Administrative, Geographic, Economic and Technological plays. For example : in Alliances for R&D between firms, technology proximity and especially Geographic plays more for R&D then for trade agreements; the administrative distance is more sought after than legal security is acquired. Cultural proximity or cultural distance does not play (Choi & Yeniyurt, 2015). For alliances in the European biotechnology sector, firms prefer the proximity to technology and the legal protection of rights, but they prefer diversity and distance for administrative, commercial and cultural (Angué & Mayrhofer, 2010). In total, the CAGET literature indicates greater distancing for commercial activities as research, and a variable mix Proximity / Distance contradicting the theoretical approaches which are based either proximity, either single knowledge center or a full dematerialization of economic relations. Universities may be regarded as operators of distancing. His can be designed according to the sequence of development of the innovation. In accordance with the approaches "CAGET" neither a pure universal operator nor pure proximity operators seem desirable. Universities need being on the technological frontier, and realize dissemination work towards more peripheral entities.

Remote effects were characterized empirically, for example in the literature CAGET. It can be advanced theoretical explanations in each of the remote effects recorded.

Acronym CAGET	Explanations of remote effect
<b>C for Culture</b>	Prospecting Reason
<b>A for Administrative</b>	Regulatory opportunity reason

<b>G for Geographic</b>	Truth : "no one is a prophet in his village"
<b>E for Economic</b>	Diversification, speculation
<b>T for Technology</b>	Technological complementarity, technology watch

**Figure 4. Remote effects**

The pure strategies of proximity or distance seem unrealistic for a complete innovation process. At the beginning of this process, a more favorable to the nearby mixed strategy seems more likely, while marketing phases seem more favorable to mixed strategies using more space to the distance.

**3. EXCHANGES AND KNOWLEDGE: THE SILK ROADS**

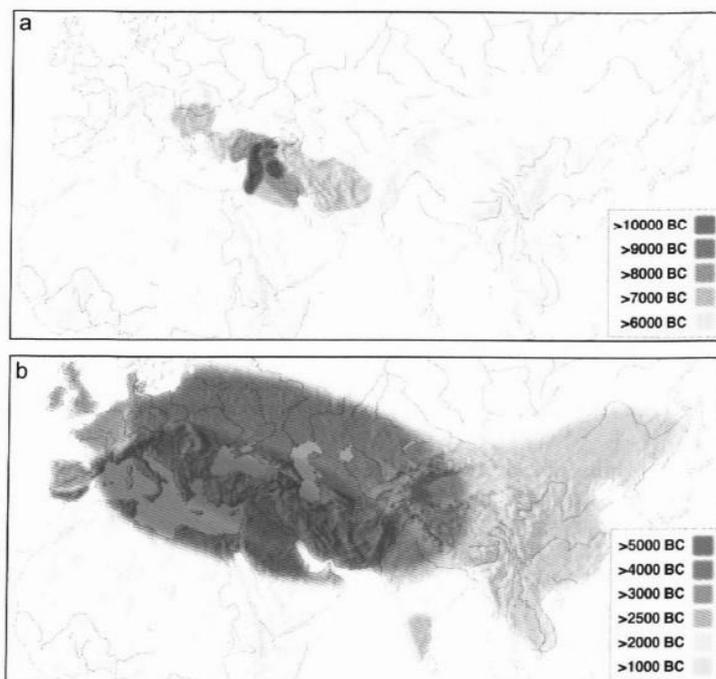
When Marco Polo dictates the devisement of the World in 1298 in Genoa prison, he embodies all remote effects. It was seen as a storyteller in Venice - « no one is a prophet in his village» -, after having done a career in Chinese imperial administration as envoy of the emperor. The Venetians arrived in China for the commercial speculation pattern, and they have integrated as an inspector in direct service of the imperial house. The reasons of regulatory exploration and technological watch are those of the private intelligence officers of the imperial court under the Mongol dynasty. Thus, the effects of distance even pre-exist when the volumes and variety of exchanges is very low.

Schematically, the silk Road They knew several reversals of their main axis of distribution, and their scheme for distance effects. Needham had advanced a general advance in the state of science and technology in China for very long time. The work of Maddison came modulate this assertion, by providing support elements to Chinese texts indicating the existence of a great political and economic empire in the far west of Eurasia (presumably, the Roman Empire). In one first inflexion point spotted by Needham, China's decline with dynasties Ming (1368-1644) and Qing (1644-1911), adds an original transfer of innovative trends around the middle of first millennium our era (AD), with the clearing of the western European and affirmation of the Chinese empire and the Silk Road.

The productive economy appears in the Near East. However its distribution is made from Mesopotamia and from Anatolian plateau, gradually wins to both ends of the Silk Road.

The spread of metallurgy retains the same schema, from the Mesopotamian and Anatolian core. The forest areas are the limits difficult to surmount. These forest barriers have remote - 1600 BC, which would explain the delayed arrival of metallurgy in China. This is done under the modality of the arrival of bronze makers very experienced to -1600 BC in the north of China; without exploitation of the abundant local copper. One's of hypothesis is recession of the taiga because of a fluctuation climate hot – 1600 BC, making it possible migration by transsiberian road. With Alexander the Great, dynamic diffusion remains centered Anatolian plateau. So spatial dynamic distribution of the first productive economy: wheat, wheel, ceramics, car, metallurgy is a diffusion which origin is nearest of Europe than China.

Spatial dynamics of Buddhist rush period (first known printed text: 868 AD; banknote: 1023 AD, powder: about 850 AD) are centered China and Silk Road in Central Asia. Thus, we can interpret the mention of Western Empire in ancient Chinese texts as the trace of the diffusion pattern of the first productive economy. The new broadcast system combines land routes and sea road, spices road. On the sea road, travel time is divided by 4 by Chinese ships between 200 and 1200 AD. The Ming and Qing periods will not bring more gain in travel time



**Figure 5. Silk road: Broadcasting axis of the productive economy**

Period *Pax Mongolica* has developed the imperial post by land (Gazagnadou, 2013). Post is introduced in Italy in the XIV<sup>e</sup> century: The diffusion shema in the Song and Yuan periods (960-1368 AD) in China for the starting point (Deng, 1997). Arrival after 1500 plants of New World in China: corn, tomatoes, potatoes (1608 AD in Shanghai) testifies a new transformation of the Eurasian dissemination scheme for the circumnavigation. The new scheme introduced by Portuguese sailors moves the broadcast center to Europe.

The contemporary characteristic of the distribution in Eurasia of the innovations is a schema where the coastal zones of the extreme the West and of the extreme are driving (Morita, Chen, 2010). The fallout bound to infrastructures and to corridors declines according to a link of Central Asia (Yu, Of Jong, Storm and at the Middle, 2013). However, the recent years indicate a progress of this fallout in the central part of the Silk Road (Laruelle, Peyrouse, 2010). There is thus a series of four main plans of distribution of the innovations along the silk road. The regime dominating exchanges and the knowledge presents in each of the plans different characteristics.

<b>Non-linearity of the growth</b>	<b>major innovations</b>	<b>Schematic distribution</b>	<b>Knowledge and exchanges</b>
<b>indolent regime low flows</b>	Productive Economy, Silk, Metal	(until about 500 AD) Centered Anatolia	Secret regime
	Printing, Powder, Coal, Postal Service	(between 500 and 1500 AD) centered East, China and Central Asia	Wonders
	Circumnavigation	(between 1500 and 1986 AD) centered Western Europe	Industrial regime
<b>regime intense flows</b>	Wide variety of products and services	Diffusion from the West and East ends	Regime intense flows

**Figure 6 : Trade arrangements and knowledge on the Silk Road**

Silkworms are bred from the beginning of agriculture in China (Yangshao Culture, fourth millennium BC). Silks have been found in tombs in Egypt around 1070 BC, attesting an active silk road from the second millennium BC. The Silk Road was first under the secrecy regime. An outdoor sericulture in China is attested to AD 300 in Japan, 450 to Central Asia, and 522 in Byzantium.

The secret regime is also evidence proved for metallurgy. The Chalybes (people of Armenia) make steel; Hittites use it to create weapons arsenal and cover this with a Secret regime. Always to -1600 BC, the first mention of this Secret regime for metallurgy is known.

Secret Regime	Wonders Regime	Industrial Regime
No freedom of knowledge	Poor quality of information	Industrial qualities of final goods
Hegemony search	Aimed primarily at a curious elite connoisseurs	
Longevity search	Large-scale circulation of information	Large-scale circulation final goods
Circulation of final good (silk) with conditions	Quota on the amount of final goods in circulation	

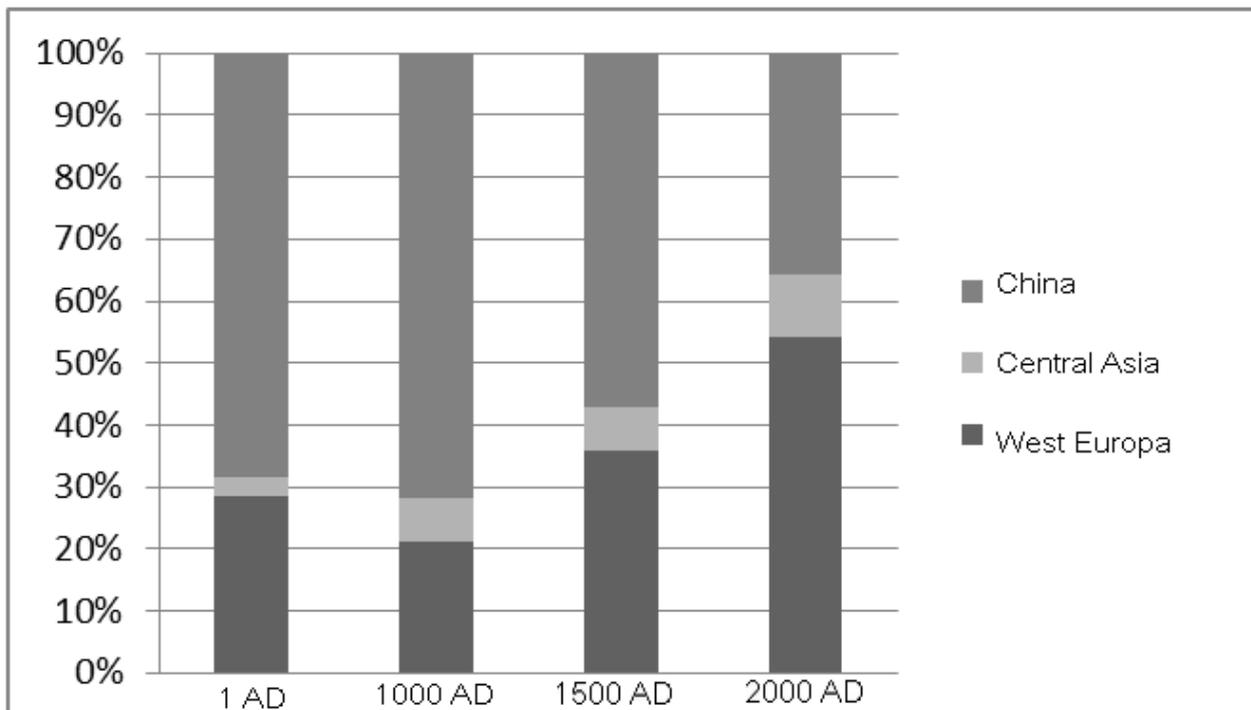
**Figure 7. Features of the old regimes of trade and knowledge**

The silk will be under that Secret regime until about 500 AD. The emergence of competing Chinese silk productions specializes in luxury. The new regime for knowledge and exchanges was the Wonders. In ancient Roman times, the wonder is defined as for understanding the natural order—privileged access to an ultimate knowledge. The exchanges of Wonders are a regime of trade and knowledge, famous through the manuscripts of the travels of Marco Polo (write in 1298 AD).



**Figure 8. Wonders exchanges between Western and Eastern merchants**  
(folio 210 of the manuscript of the National Library in Paris)

The tribes along the Silk Road are often sold. Wonders exchanges in the diet are limited quantity and quality (some silks are reserved for the imperial court). It is about exchanges which address a clientele restricted by connoisseurs. Restrictions on the amounts remain in use in the Ming and Qing eras. In Europe, the wonders would be operating between 1150 and 1750 (Daston, Park, 1998).



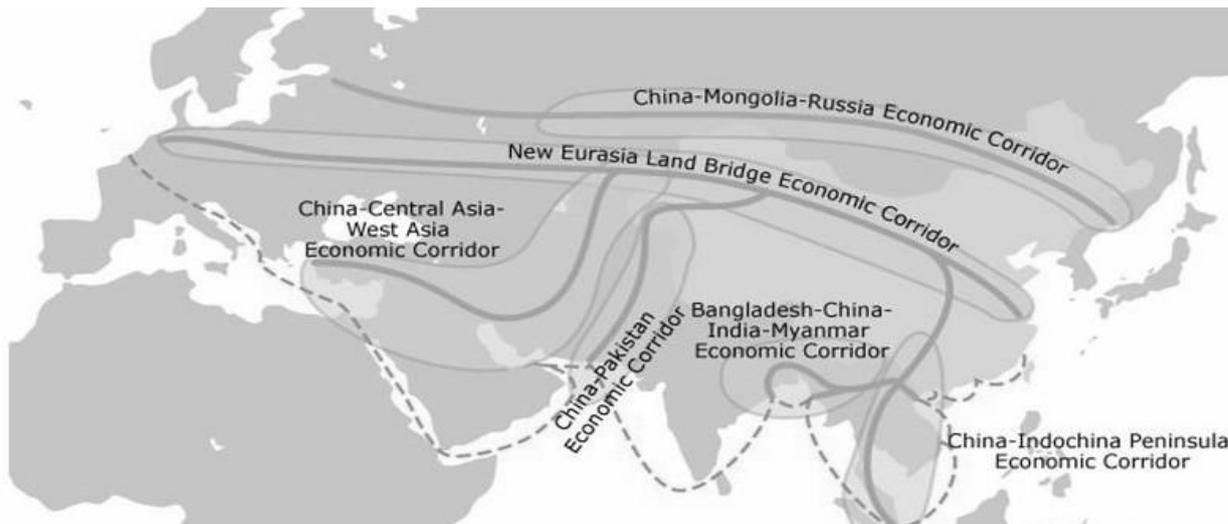
**Figure 9. From year 1 to 2000, distribution of wealth on the Silk Road**

The Silk Road never occurred by a shape of political organization mastering all the roads. An informal regionalism based on large sparsely populated areas is granting freedom of movement has probably existed throughout northern nations of a threat of more or less important. Previous analysis (Abba Gana, Callens, Gnassou, 2014) indicates the attraction for sparsely populated areas of political diagram of a juxtaposition of small mining states, inadequate training of the wealth of « intense currents of exchanges » factors and political destabilization.

The chaining of three zone pivots (North America, the Northern Europe, East Asia) by intensive currents of exchange form the « system-world» of the Trade and the Innovation of today. Spillovers do not correspond to it in recognizable governances and a promotion of the common growth only very imperfectly existing international institutions, as for example the G20 limited competence.

#### 4. ANALYSIS OBOR

Trade policy OBOR (一带一路; pinyin: Yídài yílù, new silk road) was officially launched by the Chinese Government in October 2013, particularly with a speech by Ji Jinping while traveling in Indonesia. The main institution of multilateral OBOR is the AIIB. China has 26 % of the voting rights in the AIIB. The capital of 100 billion \$ comes from 75 % of Asian capital. Another bank of OBOR, the Silk Road Fund, is fully Chinese-funded at the level of 40 Billion \$.



New Eurasian Land Bridge	Objective: reduce the transportation time by a direct route Means: connecting European and Chinese networks in the territory of Kazakhstan
China-Mongolia-Russia Corridor	Objective: Improvement of the Transsiberian routes Means : investing in Mongolia infrastructure
China Central Asia/West Asia Corridor	Objective: to ensure China's energy supply Means : connecting gas pipeline networks and oil pipelines from Central Asia; investments in Turkey, Iran, Kyrgyz Republic, Tajikistan, Kazakhstan
China-Indochina Peninsula Corridor	Objective: to develop land links between Singapore and Hong Kong Means : TGV and motorway connections in Cambodia, Laos, Myanmar, Thailand
China-Pakistan Corridor (« blood road »)	Objective: to develop a land / sea mixed track via the port of Gwadar Means: infrastructure development in Pakistan Difficulties: problems of Kashmir, disputed region between India and Pakistan, and high mountain routes (pass at 4,700 m)
Maritime road (« spices road »)	Objective: improve cabotage and secondary maritime roads Means : improving the intermediate port infrastructure

**Figure 10. The six corridors of OBOR**



**Figure 11. Faster road for trade**

The new Silk Road involves six corridors, 5 terrestrial, 1 marine. This is to reduce non-tariff costs of new transport infrastructures (rail, road, pipeline and gas pipelines). For example, rail link

Karakorum ("blood" road through the Himalayas) between China and the Indus Valley is scheduled. "Belt" countries are the most affected: Mongolia, Kazakhstan, Pakistan.

The OBOR program has an inner dimension for China. The spatial distribution of wealth and knowledge is spatially very inegalitarian, with a strong concentration in the coastal zone. Similarly, maritime corridor captures 99% of material flows, while only a few trains make the direct connection between China and Duisburg each week.

The general conception of OBOR is that of an entry in a multipolar world. Regional approach to non-tariff reduction, in addition to a multilateral approach to tariff costs. There is a willingness to search by regional cooperation with neighboring countries. The cooperation with countries without natural resources is displayed (Ze, 2014), which implies an encouraging innovation component. The approach is centralized, inscribed in a policy of the Chinese one-party. The reference to a "Marshall Plan" that was put forward by commentators is explicitly rejected by the promoters of the OBOR. Commentators are based on common features in OBOR and Marshall Plan: not targeted on the reduction on tariffs and kind with bilateral intergovernmental aspects. Unlike points are the "containment" of a threat to the defense of a cold war border was the Marshall Plan, and the gift of consideration that was appearance with that of the Marshall Plan, China advocating non interference.

## 5. CONCLUSION

Pascal Lamy compare both the TPP negotiations and TTIP indicating that one reflects a decrease of concern protectionism (TPP agreement), and the other (trading TTIP) tries to harmonize precautionary administrations (Lamy, 2015). The table may be supplemented by initiative of the Chinese OBOR, that reintroduces a development issue. The Agreement on Trade Facilitation signed in Bali in December 2013, harmonization of customs procedures within the framework of the Doha Round has been delayed by the veto of India. The New Regionalism has been accelerated by this setback addresses additional questions.

The literature on innovation 1990 remained in line with the districts. The benefits were seen having a single span, measured at 50 miles (Döring, Schnellenbach, 2004). Arithmetic in the resulting policy was simple, with a complete network by a network of universities, each university corresponding to an area of approximately 20,000 km<sup>2</sup>. OBOR a type of policy is dual significance: One Belt of politics is an enlargement policy focused on research and innovation, the policy of One Road is longer range, aimed at facilitating trade and developing corridors.

The delay by India in the development of maritime routes is assigned to another type of multi-scalar Policy (Nekrouf, 2014). Indian ports are saturated in a complex system of governance bicephalous (Region and Federation) and the double structure (regulated Ports Major and Minor Ports autonomes), having lost the ability to appropriate investment policy.

Innovation policies would be carried by "biscalars" organizations operating simultaneously at two scales, an average scale for upstream R&D, and a large scale for the downstream market access - that suggests this Asian comparison.

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